

NOAA Remotely Operated Aircraft (ROA) Kickoff Meeting Minutes

July 18, 2005

Prepared by LCDR Harris Halverson, NOAA

The first meeting was held on July 18, 2005 in SSMC, room 12836, from 0900-1120. The purpose of the meeting was to formally establish the NOAA ROA Working Group and Steering Committee, to “meet & greet” our fellow team members, to present an overview of what is happening within NOAA and other government agencies with regard to ROAs, and to start mapping-out where NOAA wants to go in the future.

The following members were present from the Steering Committee:

- RDML Richard Behn, NMAO (Co-chair)
- Dr. Alexander “Sandy” MacDonald, OAR (Co-chair)
- CAPT Craig Mclean, NOS
- CAPT Gary Petrae, PP&I
- Dr. Dave Fahey, OAR

The following members were present from the Working Group:

- LCDR Harris Halverson, NMAO (Chair)
- Sara Summers, OAR (Deputy)
- David Helms, NWS (also representing Greg Mandt on the Steering Committee)
- Dr. Richard Merrick, NMFS
- Eric Miller, NESDIS
- Todd Jacobs, NOS (by telecon)
- CDR Todd Stiles, PP&I
- Jon Sellars, Commerce & Transportation
- Dr. Jim Elkins, Climate

The following persons attended as observers (per VADM Lautenbacher’s direction)

- Colonel Mark Weadon, US Air Force
- Mr. Phil Vinson, US Navy
- Dr. Betsy Weatherhead, U. of CO – invited by Sandy MacDonald

Welcomes were extended and opening remarks were made by LCDR Halverson, RDML Behn and Dr. Macdonald, followed by personal introductions by each member.

LCDR Halverson led the discussions and the outline follows:

- How we got to this meeting - including recommendations from May 4, 2005 NEC
- Introduce Working Group & Steering Committee Members
- Purpose and Mission statements (draft)
- ROA 101 - what’s happening with ROA’s now?
- Can ROA’s fulfill gaps in NOAA requirements?
- NOAA / NASA / GA-ASI Altair demo overview – Ms. Sara Summers
- NOAA ROA’s in the PPBES process
- Where do we want to go?
- Responsibilities of this group

An overview of Steering Committee and Working Group responsibilities were laid out, and will be modified over time. The initial responsibilities are as follows:

- Develop a NOAA UAS Charter for the Steering Committee (utilize AUV Working Group Charter)
- Brief NOAA leadership on successes / challenges of Altair Demo
- Determine funding within the PPBES process and coordinate future UAS demonstrations
- Continue to build relationships with other government agencies – Sara Summers will lead
- Continue to work with RTCA SC203 and Access 5 to gain routine same day “file & fly” access to National Airspace System (NAS)
- Develop Senate Committee Report, in conjunction with NASA, “on the potential use of UAV’s to operate in the near space environment for a variety of scientific and operational missions” (by 3/17/2006)
- Monitor NOAA evolving requirements and determine if UAS’s can fill critical gaps in observing systems
- Develop a NOAA UAS “Roadmap” (similar to DoD)
- Make recommendations to NOAA leadership on whether to own, lease or rent a UAS. Develop Cost and Operational Effectiveness Analysis (COEA) in conjunction with NASA – including safety concerns
- Brief various NOAA Councils
- Continue to use and develop NOAA UAS website

CAPT Petrae initiated discussions on whether to call this a Program or a Project. Due to current terminology within NOAA and to prevent any confusion during future meetings or presentations, it was agreed upon that this effort will be designated a Project. He also recommended that a PP&I transitional board member attend meetings starting sometime in FY06 to help facilitate a possible change from Project to Program status within NOAA.

Dr. Richard Merrick took exception to the comment in the brief that stated, “ROAs are the best choice for dull, dirty, and dangerous mission.” Dr. Fahey tended to agree. This is a term that has come from DoD and may or may not apply to NOAA missions. It was agreed upon that this phrase will be removed from future ROA presentations.

The Senate Committee Report was discussed which directs NOAA to, “in conjunction with NASA, report on the potential use of UAV’s to operate in the near space environment for a variety of scientific and operational missions...” This report is due by March 17, 2006. LCDR Halverson and Sara Summers will take the lead on this and have already begun discussions with their NASA counterpart - Ms. Cheryl Yuhas. The report should be cleared through NOAA December 17, 2005.

Information was presented on NASA’s possible acquisition of Global Hawk Air Vehicle One (AV-1) by spring/summer ’06. However, the aircraft would not be ready to complete science flights until late ’07 or ’08. A Letter of Intent (LOI) has been sent from

NASA to the USAF at Wright-Patterson AFB to confirm the transfer. NASA is working on a plan of action and cost analysis to accept the aircraft, as well as a plan to determine their costs of building their own Ground Control Station (GCS). LCDR Halverson and Sara Summers have been in contact with NASA Dryden frequently, and will continue to update the group as things develop. This could be an excellent opportunity for NOAA.

Information was also presented on the USAF's plan to use the Aerosonde ROA to fly into and around hurricanes and winter storms this summer and fall. Tests will be conducted at Wallops, VA from August 8-12th and CDR Todd Stiles volunteered to attend as an observer for NOAA. (LCDR Halverson will most likely be on baby leave).

A decision was made to change the name of the Steering Committee and Working Group from ROA to Unmanned Aircraft System (UAS). This recommendation was made by LCDR Halverson and approved by the Steering Committee. The term UAS is the term accepted by the FAA, and it will be prudent for NOAA to follow this lead. The term UAS includes unmanned and aircraft as well as system, which encompasses the ground control station and the satellites often needed to operate these assets.

Discussions were held on the results of Dr. Marty Ralph's (ST&I Program Manager) tasking from the FY07-FY11 PDM that required ST&I to conduct a NOAA-wide ROA requirements analysis and evaluation and include it in FY08 PBA. The spreadsheet that was developed was of interest to members of the group, and will be emailed to all members by Sara Summers.

Sara Summers and OAR also agreed to take the lead on developing and managing an intranet website for Steering Committee and Working Group use and a separate link from the main NOAA website to UAS activities.

There was robust discussion on what will be the follow-on mission to the joint NASA/NOAA Altair demonstration currently being held with GA-ASI. Is it too late for a project in FY06? The current demo has experienced aircraft set-backs and is scheduled to be completed during late-August or early-September '05. The final result of this demo, along with no funding as of now for FY06 will play major roles in this decision. A possible spring '06 Northwest Hawaiian Islands project could be completed, but would need funding. Request for money through Council NEP or NEC briefings (to be given by the Co-chairs of the Steering Committee) will not be requested, however, until results of the current Altair demo are known.

RDML Behn requested a meeting be set-up with CAPT Petrae in PP&I to discuss a possible strategy on whom to brief and educate next, i.e. Mary Glackin, Bonnie Morehouse, and/or various NOAA Councils. LCDR Halverson will take for action.

A NOAA UAS Steering Committee Charter will be developed to include purpose and mission statements, and responsibilities of the Steering Committee and the Working Group. LCDR Halverson and Sara Summers will take for action.

It was agreed upon to hold monthly UAS Working Group telecons and quarterly meetings to include the Steering Committee. This meeting schedule can be modified based upon NOAA UAS activities.

A letter from the Co-chairs of the Steering Committee will be sent to VADM Lautenbacher to inform him of this meeting. The name change from ROA to UAS will also be included in the letter. LCDR Halverson will take for action.